



ENVIRONMENTAL PERMITTING, INC.

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Mr. Edwin Muñiz
 Chief, Antilles Regulatory Section
 U.S. Army Corps of Engineers
 400 Fernández Juncos Avenue
 San Juan, Puerto Rico 00901-3299

18 December 2002

Dear Mr. Muñiz:

Reference is made to your 13 May 2002, letter; our 10 July 2002, response; your 15 August 2002, letter, and our 22 October 2002, response, regarding the list of comments received in response to the Public Notice for Department of the Army permit application No. 198800516(IP-VG), submitted on behalf of Villa Marina Yacht Harbor, Inc., to expand an existing marina by 225 additional slips. The proposed marina expansion is specifically located on the eastern end of Villa Marina, at PR-987, km 1.7, Sardinera Ward, Municipality of Fajardo, Puerto Rico.

We would like to recapitulate on the concerns and doubts raised in your letters regarding our project, by grouping those items with a common denominator, as follows:

1. Coastal Dynamic Study - In the revised Environmental Impact Statement (EIS) document (copy enclosed for your records) submitted to the Puerto Rico Planning Board (PRPB) on 22 February 2001, Appendixes "B" and "C" contains a study of the currents and sedimentation performed by Ecosystems & Associates, Inc., on 15 November 2000. The study concludes that, under normal conditions, there is not sufficient energy from bottom currents in the bay where the breakwater is to be constructed to have a deleterious effect on the sediments within Sardinera Bay, nor the normal accretion or erosion of nearby beaches. It also states concludes that there will be no adverse impacts from construction of the proposed breakwater. However, you also stated in your last response that the study, submitted and accepted by the PRPB, was "inadequate and defective". Please indicate in your response what changes need to be done to the study to make it adequate and effective. For the record, we would like to clarify that Sea Lover's Marina was not required to provide such a study for its proposed expansion, also located within Sardinera Bay.

2. Proposed Breakwater and Bathymetry - The rock and boulders for the construction of this structure will be brought to the site by truck from a nearby volcanic and karst quarries (Fajardo, Río Grande), loaded into a barge and deposited and accommodated with a crane mounted on the barge. Large stones (at least six feet in diameter) will be set apart to be placed first, as these will constitute the foundation of the breakwater and control any horizontal spread of the structure. Concrete tubes underneath the breakwater will be placed to improve water circulation. The wall inclination angles

) will be achieved as small stones are placed on top of smaller stones. These steps are the typical and logical steps of constructing a breakwater. The amount of fill calculated to construct the breakwater is obtained by calculating the area of a trapezoid, which is what our design attempts to achieve. The proposed breakwater is to be constructed as if it were an extension of the breakwater constructed by Puerto Chico Marina, with an opening for the ingress and egress of marine craft. If the existing breakwater has sustained hurricanes such as George, we foresee no problem in our breakwater behaving the same way, given that they will be similar in size.

On the other hand, the "gap" between the terminal end of Puerto Chico Marina's breakwater and our proposed breakwater is approximately 200 feet, as you may see from the enclosed plan. If any high energy waves are produced during storm events and enter through the gap, they will land against the 700 feet long boardwalk, where no mooring of boats is proposed. All other marine craft will be located behind the boardwalk, protected by this structure.

) Regarding the bathymetry of the area, please explain in what locations does the USACE need us to perform additional bathymetry, and what methodology does the USACE suggest to help your staff obtain a better informed decision about the environmental impacts of this project.

3. Navigational Clearance between Villa Marina, Sea Lover's Marina and Puerto Chico Marina - It has been stated by the U.S. Army Corps of Engineers (USACE) that the channel width between the existing Marina Puerto Chico breakwater and the proposed Villa Marina breakwater is "insufficient". We need clarification on this statement. The proposed channel width between each breakwater will be 200 feet. We believe that any ordinary, 25 to 35 foot long boat is capable of ingress and egress through this channel - even two boats of this length at the same time. In addition, if the USACE has field data stating that the existing Marina Puerto Chico breakwater extends underwater for a considerable distance, affecting the usable width of the navigation channel, we would like to know how far and how high does this breakwater extends to make any necessary changes in our design.

Villa Marina's proposed expansion was realigned as the result of Sea Lover's Marina expansion approval, so as to provide proper distances, clearances, etc. There is no interference or conflict between each of the marinas. In addition, Sea Lover's Marina has not provided evidence of its ability to perform this expansion. Almost 150 feet of navigation space will be available between Villa Marina's 700 feet long boardwalk (where no mooring will be allowed by placing railings) and the proposed terminal "T"s of

Sea Lover's Marina. The 150 feet wide channel is more than adequate to service Sea Lover's Marina, as the industry's standard is one and a half the length of the vessel. To our knowledge, Sea Lover's Marina cannot handle boats of over 100 feet in length. Nevertheless, there will be ample space to turn in the "inlet" that has been created to the East of Sea Lovers Marina. From the existing pier in the uplands to Sea Lover's Marina proposed terminal "T"s, the distance is 273 feet long – more than enough for the maneuvering of "large vessels". The same holds true of the channel on the South side that allows access to the existing facilities of Villa Marina. A presentation will be done to the U.S. Coast Guard at the beginning of January 2003 to cover all aspects of proper clearance between boats as they access/egress our proposed facilities.

The intermediate docks in Villa Marina will be used by boats that range between 25-30 feet. The space available to backup the craft (the distance between mooring pilings) is 60 feet, or twice the size of the boats that are expected to use these facilities. This space is sufficient to allow maneuvering of the craft to enter or exit the docks.

4. Sewage Pump-out Facility - The Board of Directors of Villa Marina has decided that a movable (portable) pump out station will be used in the proposed facilities to service vessels, just as it is done in the existing marina. These services will be offered by the current provider, *Sea Rescue* (Vessel Assist). The station will then discharge directly into a sewage connection on land, managed by the Puerto Rico Aqueduct and Sewer Authority (PRASA).

5. Fuel Spill Contingency Plan - No fuel will be served in the proposed Villa Marina expansion, as the existing fueling facilities in the marina are sufficient. There is a Fuel Spill Contingency Plan (FSCP), including spill kits, instruction to employees and posting of emergency numbers and environmental companies to be called in case of emergency. The existing plan will cover the proposed expansion. Once construction of the proposed marina expansion begins, the revised FSCP will be submitted to the USACE as a Special Condition to the permit.

6. Fishermen of Sardinera Bay - None of the fishermen that use Sardinera Bay have objected to the project. These citizens may leave their premises through the navigable waters that will remain between the proposed Sea Lover's Marina expansion and our proposed expansion. Since their fishing boats rarely exceed three feet in draft, the depths at this area are enough to allow for adequate passage of their vessels.

7. Alternative Analysis and Environmental Impacts of the Project – Pages 54 through 55 of the enclosed Environmental Impact Statement (EIS) contains the Alternative Site

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Analysis for this project, including not constructing the project, constructing in another site and constructing the project. This is a water-dependent project which consists on the expansion of the existing marina, which leaves not many choices as to alternative sites. Impacts to the aquatic environment are minimal, since there are no algal beds, coral reefs, sponges or other benthic organisms that will be impacted by the proposed project. In addition, it has been shown in this letter and past responses that potential conflicts with the conservation of adjacent riparian owners property are non-existent – only the desire of Sea Lover's Marina and Puerto Chico Marina owners to eliminate what will be financial competition for them. On the other hand, extension of the Puerto Chico breakwater to protect our property could pose serious legal trouble between both parties if for any reason the breakwater fails during a severe storm or hurricane and damage to our property occurs. This idea contradicts one of the basic concerns suggested by the USACE to be considered: conservation of adjacent riparian owners property.

8. Coastal Dynamic Study and Sand Accretion & Erosion – Please see our response to Item No. 1 in this letter.

9. Construction of the Proposed Breakwater - There is no requirement of placing additional discharge of fill material to construct the access platform. Please see our response to Item No. 2 in this letter.

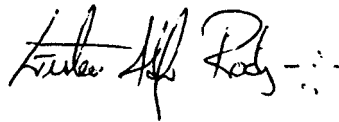
10. Maintenance dredging - The proposed maintenance dredging is to take place inside the Villa Marina basin, neither in Sardinera Bay nor in the area where the marina expansion and the breakwater are proposed.

We are targeting a meeting with staff from the U.S. Coast Guard and Mrs. Vivian Gerena, of the USACE, on the week of 13 January 2003, to present them our project and answer any concerns they may have.

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We thank you for your comments and for helping us achieve a more secure design of the Villa Marina expansion. If we may be of further assistance, please contact us at (787) 790-6707 or (787) 396-0640.

Sincerely,



Gustavo Adolfo Rodríguez
President
ENVIRONMENTAL PERMITTING, Inc.

Enclosures

Copy: Mr. Eduardo Ferrer, Villa Marina
Ms. Rose Ortiz, PRPE